

Open Jigs. — Open jigs of the simpler forms are simply plates provided with bushed holes which are located to correspond with the required locations for the drilled holes. While holes are sometimes drilled by first laying out the holes directly upon the work, it is quite evident that this method of drilling would not be efficient if a large number of duplicate parts had to be drilled accurately, as there is likely to be more or less variation in the location of the holes, and considerable loss of time. In the first place, a certain amount of time is required for laying out these holes preparatory to drilling. The operator,

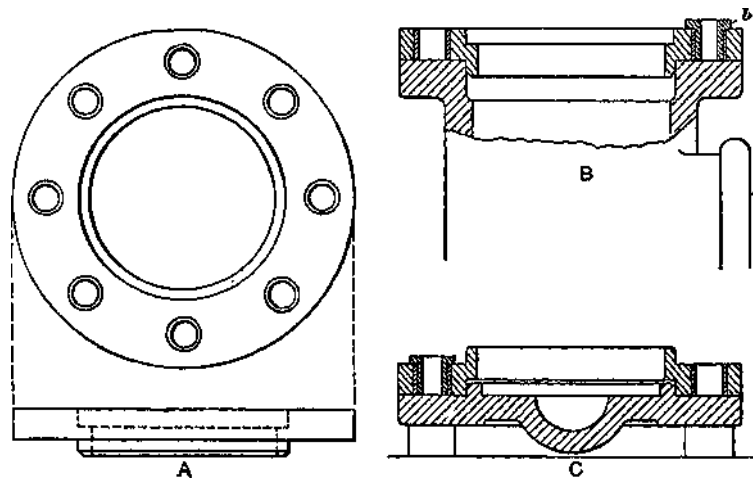


Fig. 1. Jig for Cylinder Flange and Head, and its Application

when starting the drill, must also be careful to make it cut concentric with the scribed circle, which requires extra time, and there will necessarily be more or less variation. To overcome these objections, jigs are almost universally used for holding the work and guiding the drill, when drilling duplicate parts, especially when quite a large number of duplicate pieces must be drilled.

The ring-shaped jig shown at A in Fig. 1 is used for drilling the stud bolt holes in a cylinder flange and also for drilling the cylinder head, which is bolted to the cylinder. The position of